

REMARKS/ARGUMENTS

Status of Claims

Claim 1 has been modified to include the features of Claim 2.

Claim 2 has been cancelled.

Claim 14 has been rewritten in independent form.

Allowable Subject Matter

Applicant acknowledges with appreciation the Examiner's indication that Claims 12-14 are merely objected to as being dependent upon a rejected base claim, but would be allowable if re-written in independent form, including all the limitations of the base claim and any intervening claims. Adopting the Examiner's suggestion in certain respects, Applicant presents Claim 14 rewritten in independent form.

Rejection of Claims 1, 3, 5, 9-11 and 15-16 Under 35 U.S.C. §102(b) as Being Anticipated by Copeland et al.

The Examiner rejects the above-referenced claims as allegedly being anticipated by Copeland et al. In response, Applicant has amended Claim 1 in a fashion believed to overcome such rejection. Specifically, Applicant has incorporated limitations of Claim 2 into Claim 1. As such, Applicant respectfully requests that the Examiner reconsider and withdrawal all §102(b) rejections of claims based upon Copeland et al.

Rejection of Claims 2 and 4 Under 35 U.S.C. §103(a) as Being Unpatentable Over Copeland et al. in view of Jeavons et al.

Applicant traverses the Examiner's obviousness rejection for the reasons as set forth below.

The intended purpose of Jeavons et al. (US Pat 1,978,536) is to produce a solution of Barium hydroxide [Ba(OH)₂] for treating clay. The fact that the solution must be of Barium hydroxide is essential for the invention to work (in this regard, see, in particular, page 1, lines 7-23; page 2, lines 30-44).

In order to achieve its aim Jeavons et al. proposes to keep crystals of Barium hydroxide under water in order to dissolve them.

According to pending Claim 1, the loading chamber (which contains the solid chemical substance which has to be dissolved) is located above the collocating portion (where the aqueous solution is kept). The solid chemical substance is, thus, only wetted by the jet(s) of water arriving from the water-dispersion means.

The water coming from the water-dispersion means would not be sufficient to dissolve the Barium hydroxide, which has a very poor solubility in water. To be dissolved, Barium hydroxide must be immersed. (The solubility of Barium hydroxide is about 56 grams/Liter whereas the solubility of Sodium Hypochlorite is about 293 grams/Liter).

It clearly follows that the proposed modifications would render Jeavons et al. unsatisfactory for its intended purpose.

Since, according to the MPEP (see in particular 2143.01 V) and consistent jurisprudence (e.g. *In re Gordon*, - Fed. Cir. 1984) “[i]f proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification”.

It follows that the teachings of Jeavons et al. are unsuitable for combination with other prior art in order to sustain a rejection for obviousness.

The Prior Art References do not Teach all the Limitations of Claim 1

Claim 1, as amended, specifies that the water-dispersion means are located in the loading chamber at the top of the dissolving portion. This feature is neither disclosed nor suggested by any of the cited documents. The Office Action did not identify such a feature as either disclosed or suggested.

Indeed, even if a skilled person had wanted to combine Copeland et al. (US Pat 5,137,694) with Jeavons et al., they would not have arrived at the claimed invention.

Solely for the sake of argument, Applicant submits that, presuming a skilled person, in order to dissolve less soluble material (this is the aim of Jeavons et al.) would have modified Copeland et al. by inserting part of the solid chemical substance 130 in the lower chamber 30b, they would not have found any hint to locate the spraying nozzle

within the solid chemical substance 130. In this regard, it should be emphasised that the solid chemical substance 130 is, indeed, a solid block (see, for example, column 8, line 68).

It is respectfully submitted that Claim 1 does not relate to the general concept of immersing a portion of a solid chemical substance, but rather to the very specific, undisclosed invention of locating water dispersion means in a loading chamber at the top of a dissolving portion; the loading chamber also having a storage portion for containing the solid chemical substance and located above the dissolving portion.

Applicant submits that to establish obviousness, particular findings must be made as to the reason a skilled artisan, with no knowledge of the claimed invention, would have selected particular components for combination in the manner claimed. *In re Kotzab*, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000). There must be some articulated reasoning with some rationale underpinning to support the legal conclusion of obviousness. *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006); *see also KSR Int'l Co. v. Teleflex*, 127 S. Ct. at 1739. In the present case, the Examiner has failed to present a *prima facie* case of obviousness because neither Copeland et al. nor Jeavons et al. teach or suggest the claimed elements.

For all the foregoing reasons, Applicant respectfully submits that all claims are now in a condition for allowance and as such, the Examiner's favourable consideration of the same is requested.

The Examiner is invited to contact undersigned counsel to address any outstanding concerns and Applicant's counsel can be reached directly at (303) 863-2977.

Respectfully submitted,

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Date: 3/10/09